

ABSTRACT OF THE DISCLOSURE

A self-driven direct energy conversion system is to be provided which can suppress global warming using a heat generation apparatus that can obtain a circulating type and open system energy source utilizing exhaustless, reusable thermal energy with no pollution in the natural world. The system has a thermal energy transfer module which a Peltier effect device group is separated from a Seebeck effect device group at a given distance, an electric power generating module, and an electrolyzer module in which thermal energy transfer and electric energy conversion are conducted, and a water electrolyzer circuit artificially forms a chemical energy source of hydrogen gas and oxygen gas easily pressurized, compressed, accumulated, stored, and transferred. Thus, thermal energy, electric power, and chemical energy are utilized.